

Curricula

Corporate Environmental Management Program at the University of Minnesota

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It is our pleasure to announce the launch of a new **Corporate Environmental Management** academic program at the University of Minnesota-Twin Cities. The program is a cooperative effort between the Department of Bio-based Products, the College of Natural Resources, and the University's Carlson School of Management, and is currently accepting students for Fall 2005. **Corporate Environmental Management** encompasses sustainable strategies and practices that aim to meet the needs of corporations while seeking to enhance, support and protect the environment and natural resources.

Education

The **Corporate Environmental Management** program is designed to provide graduates with the tools necessary to address the environmental impact of a corporation by (1) recognizing sustainable business opportunities that generate value associated with a firm's products or manufacturing processes and (2) identifying opportunities to reduce current and future environmental burden to both the firm and society. Once in the field, students would have the opportunity to apply the tools and concepts of industrial ecology and their links to corporate environmental management to a wide range of environmental situations. Other avenues students will be prepared to explore include establishing corporate environmental policies, implementing Environmental Management Systems (EMS), conducting environmental risk analysis and applying international and other environmental standards to the corporate setting.

The **Corporate Environmental Management** program is offered as an important new specialization under the Environment and Natural Resources (ENR) major within the College of Natural Resources and is open to all University students as an undergraduate minor. This program seeks to strengthen business management curricula both as an ENR major specialization and as a minor option and provides breadth in the environmental compliance arena. Key elements of the **Corporate Environmental Management** program include courses in Life Cycle Assessment (LCA), environmental regulatory compliance, management of environmental performance, industrial ecology, sustainability, economics, and fundamentals of business management. Courses in LCA, fundamentals of business management, environmen-

tal management systems, and environmental regulatory compliance are common to both the major and minor. The CEM major includes, in addition, exposure to the fundamentals of industrial processes, industrial pollutions, environmental engineering, and industrial bio-technology.

Research

The **Corporate Environmental Management** program seeks to embrace a wide range of researches in close cooperation with industries. The massive amount of natural resource use as well as environmental pollutant emission of our economy poses important challenges and great opportunities for today's businesses. On one hand, continuous improvement of firms' environmental performance through solid business strategy is necessary. On the other hand, efficient communication within and between firms in the supply-chain, stakeholders, and the general public is in need. These requirements lead to the main research areas of the **Corporate Environmental Management** Program:

- Development of corporate sustainability/environmental strategy
- Design of corporate sustainability/environmental reporting systems

In particular, the following areas will be extensively explored in the context of corporate environmental management:

- Life Cycle Assessment (LCA) / Life Cycle Management (LCM)
- Environmental marketing and supply-chain management
- Environmental Management Systems (EMS)
- Organizational management and change
- Management of the corporate/governmental policy interface
- Management of hazardous substances
- Extended Enterprise Resources Planning (EERP)
- Eco-efficiency

Furthermore, we are envisioning lively researches in the broad field of industrial ecology and its applications, and are interested in building active partnerships with other universities and research institutes in the related fields. Please contact Dr. Sangwon Suh (suh@cml.leidenuniv.nl) or Dr. Timothy Smith (smith463@umn.edu) for further information.